

If it is determined at step S11-16 that the camera viewing axis is within $\pm 30^\circ$ of the horizontal, then it is determined that the selected input image shows the part of the subject object 210 which the user at customer processing apparatus 2, 4 positioned to face front marker 170 sufficiently well that the input image can be displayed as the first image at a third party apparatus.

Accordingly, at step S11-18, processing apparatus 6 makes the 3D data file defining the 3D computer model generated at step S4-38 and the image data of the input image selected at step S11-12 available for access by third-party apparatus.

Referring again to Figure 8, when steps S8-6 to S8-10 are performed in the third embodiment, the 3D data defining the 3D computer model is transmitted to the third-party apparatus together with the image data defining the selected input image, and instructions instructing the third-party apparatus to display the image data as the first image. Accordingly, at step S8-10, the third-party apparatus displays the image data of the input image previously selected at step S11-12 instead of rendering the 3D computer model to generate an image. However, in response to user input instructions at step S8-12, the

3D computer model is rendered to generate and display subsequent images at the third-party apparatus.

Similarly, referring to Figure 9, when steps S9-6 and S9-8 are performed in the seventh embodiment, instead of rendering the 3D computer model in accordance with stored viewing parameters, the image data for the input image selected at step S11-12 is transmitted to the third-party apparatus for display.

Referring again to Figure 11, if it is determined at step S11-14 that the angle α is not less than or equal to the predetermined angle, or is it is determined at step S11-16 that the angle β is not less than or equal to the predetermined angle, then processing apparatus 6 determines that the input image selected at step S11-12 is not sufficiently front-facing to the front marker 170 to show a good image of the part of the subject object 210 which the user at customer processing 2, 4 positioned to face the front marker 170. Accordingly, in this case, processing proceeds to step S11-20 rather than step S11-18.

At step S11-20, processing apparatus 6 calculates data defining a virtual viewing camera for the 3D computer

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model in the same way as in any of the first, third and fifth embodiment. Alternatively, a default viewing camera may be used as in any of the second, fourth and sixth embodiments.

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At step S11-22, processing apparatus 6 makes the data defining the 3D computer model generated at step S4-38 available for access by a third-party apparatus, together with data defining the viewing camera generated at step S11-20 (if applicable).

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Eighth Embodiment

An eighth embodiment of the present invention will now be described.

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The components of the eighth embodiment and the processing operations performed by the components are the same as those in the seventh embodiment, with the exception that the processing described above with reference to Figure 11 in the seventh embodiment is changed.

Figure 13 shows the processing operations performed in the eighth embodiment to replace the processing